



## *Cotton Insect Newsletter*

Volume 3, Issue #1

Edisto Research & Education Center in Blackville, SC

18 April 2008

### *Newsletter Update*

This initial installment of the Cotton Insect Newsletter for 2008 will serve as a reminder that I will start sending out weekly newsletters concerning the situation with cotton insects when the “cotton season” gets underway in early May. I will also try to cover insects that become problematic in soybeans. Because of the increased acreage, soybeans could become a huge source of important insects for our state. As in previous years, the newsletter will go out via email on Thursdays, allowing time for incorporating news of the week and preparation.

If you would like to be removed from the email distribution list that will receive these weekly newsletters or if you know of someone else who would like to be included, please let me know ([green4@clemson.edu](mailto:green4@clemson.edu)).

### *Crop Situation*

We do not have a crop yet, but I am sure that will change soon as things warm up in the next couple of weeks. Here is where we have been for the last few years on cotton acreage in SC and where USDA-NASS stands on current estimates.

Year	Planted Acres (PA)	% Difference (PA) from Previous Year	Harvested Acres	Yield (lb lint/acre)
2004	215,000	-	214,000	875
2005	266,000	+24%	265,000	743
2006	300,000	+13%	298,000	697
2007	180,000	-40%	158,000	486
2008	120,000?	-33%?	-	-

### *News from Above the Lakes*

This section will again serve as a place where I will include comments from any and all that submit information about the state of the crop(s) (cotton or soybeans) and the insect situation in their local area from “above the lakes”. I am intending for this to serve as a hub for statewide information. Evaluations returned on this newsletter last year identified that these sections of the newsletter would be very valuable if more external contributions were submitted regularly. Please send me your observations and comments!

### *News from Below the Lakes*

Same as above, but pertaining to news in the southern part of the state.

*Clemson University offers its programs to all eligible persons, regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Equal Opportunity Employer.*

*The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.*



### **South Carolina Summary (2007)**

Cotton was planted on about 180,000 acres in South Carolina during 2007. That was a reduction of about 40% from that planted in 2006. Most of the reduction was due to increased acreage planted to corn and soybeans.

About 95% of the cotton acres were planted with varieties containing Bt technology. Early-season problems were characterized by dry conditions and moderate levels of thrips. Minor problems were encountered with miscellaneous pests (false chinch bugs, burrower bug, etc.) during the early-season window. Mid-to-late-season insect problems consisted of bollworm primarily.

There were some areas that developed problems with fall armyworms. Populations of secondary pests such as aphids and spider mites were generally not problematic. In most locations of the state, numbers of sucking bugs (i.e. stink bugs) were extremely low in comparison with those of previous years. In summary, the bollworm was a significant pest of SC cotton during 2007 in certain locations, but Bt cotton performed well in suppressing their numbers. Losses were due mostly to the extreme drought conditions that persisted for much of the season.

## **South Carolina – 2007**

- Acreage: 180,000 total (40% < 2006)
  - Delta Pine (85.9%)
  - Stoneville (7.5%)
  - PhytoGen (4.1%)
  - Fibermax (1.4%)
  - Dyna-Gro (0.61%)
  - Bt: 170,442 acres (94.7%)
    - DP 555BG/RR (62.5%)
    - DP 454 BG/RR (5.0%)
    - DP 515BG/RR (4.2%)
    - ST 4554B2/RF (4.0%)
  - Non-Bt: 9,558 acres (5.3%)
- Early-season problems
  - Thrips, false chinch bug, burrower bug
- Mid-season problems
  - **Bollworm**
- Late-season problems
  - **Bollworm**, fall armyworm, sucking bugs (very late, if problematic)
- Major pests for 07:
  - **Bollworm**, sucking bugs - a “no-show”
- Yield deterrents:
  - Droughty, hot conditions, bollworm
- Yield:
  - Forecasted: 650 - 485 lb
- Losses:
  - Mostly due to extended dry conditions, HEAT, bollworm

Jeremy Greene  
Clemson University

### **Structured Non-Bt Cotton Refuge**

Last year after planting was complete, EPA officially “ruled” that a structured cotton refuge would no longer be required for BOLLGARD II cotton east of Texas. Later in 2007, the same decision was officially released concerning WIDESTRIKE cotton. The natural refuge option is available for any brand of cottonseed with BOLLGARD II technology or any PhytoGen brand cottonseed containing WIDESTRIKE planted east of Texas.

This ONLY applies to BOLLGARD II and WIDESTRIKE cotton – it does not apply to original BOLLGARD cotton (e.g. DP 555 BRR) which still requires a structured non-Bt cotton refuge. **Bottom Line:** You no longer have to have a refuge for your BOLLGARD II and WIDESTRIKE cotton, but you must maintain the same refuge requirements for BOLLGARD.

**\*YOU STILL HAVE TO PLANT AND MAINTAIN A STRUCTURED REFUGE FOR ORIGINAL BOLLGARD COTTON IN 2008!\***

---

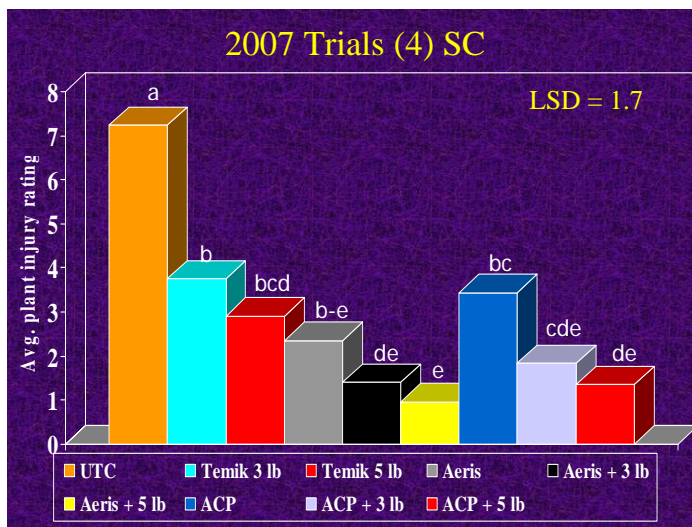
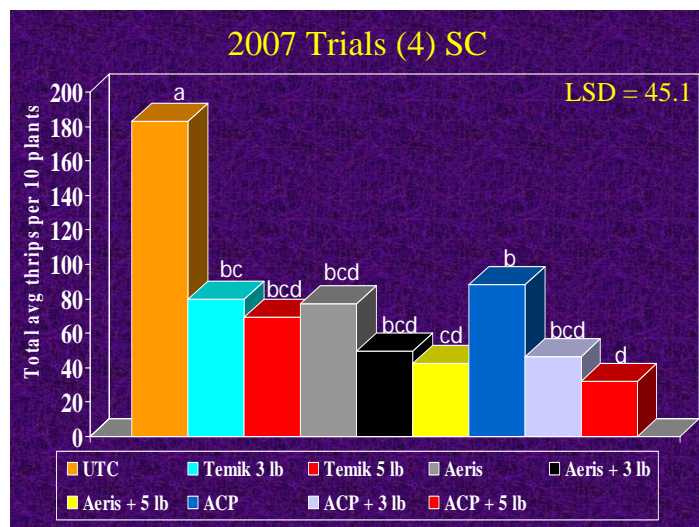
*Clemson University offers its programs to all eligible persons, regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Equal Opportunity Employer.*

*The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.*



### **Management of Thrips/Nematodes**

I would prepare for another moderate to heavy early season with thrips. Tobacco thrips, *Frankliniella fusca*, continues to be our predominant early-season species, and there are numerous options for controlling thrips in cotton. In addition to Temik, the long-time standard in-furrow insecticide/nematicide, multiple seed treatments, such as Gaucho Grande, Cruiser, Avicta Complete, and Aeris, remain available for preventative control of thrips. Aeris and Avicta are choices for an insecticide/nematicide combination. Below are summary data from trials I conducted last year in SC. On the left are seasonal thrips totals across 4 trials. On the right are average injury ratings for the season, with “10” being dead plants and “0” being no visible injury. Although all treatments resulted in significantly reduced populations of thrips when compared with UTC plots, Avicta plus 5 lb of Temik at planting resulted in the lowest seasonal total of thrips, but Aeris plus 3 or 5 lb of Temik and Avicta plus 3 lb of Temik provided comparable control of thrips as well. Aeris alone and 5 lb of Temik alone were included in the lowest statistical grouping. Symptoms of feeding injury were lowest where Aeris plus 5 lb of Temik was used at planting, but Aeris alone or with 3 lb of Temik and Avicta plus Temik (3 or 5 lb) were statistically in the lowest group of injury.



### **Need More Information?**

Log on to the following webpage to view important cotton management recommendations, data, and historical cotton insect newsletters: <http://www.clemson.edu/scg/ipm/cotton.html>

Sincerely,

Jeremy K. Greene, Ph.D.  
Cotton Entomologist



Visit our website at:  
<http://www.clemson.edu>

*Clemson University offers its programs to all eligible persons, regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Equal Opportunity Employer.*

*The mention of any commercial product in this publication does not imply its endorsement by Clemson University over other products not named, nor does the omission imply that they are not satisfactory.*